

### **Guidelines to submission of abstracts**

All abstracts must be written in English and submitted electronically as a **Microsoft Word** document. Abstracts must conform to the following guidelines:

- 1) Paper size: Letter (8.5 inches by 11 inches or 22 cm x 28 cm)
- 2) Margins: 1 inch (2.5 cm) on all four sides
- 3) Font: Times New Roman 12 pt.
- 4) Body of the abstract should be single spaced and left justified.
- 5) Length (including title and authors) should not exceed one page (approx. 500 words)
- 6) Title and authors names centered. The title should be bold. Authors' affiliation should be given. If more than one author, the presenter's name should be bolded.

All abstracts should be emailed as an attachment to Dr. David Gwaze ([david.gwaze@mdc.mo.gov](mailto:david.gwaze@mdc.mo.gov)) by **March 31, 2006**.

[See below for an example of an abstract.](#)

## *Example Abstract*

### **A 16-year evaluation of effects of ripping on shortleaf pine on a Missouri Ozarks**

**D.P. Gwaze<sup>1</sup>, C. Hauser<sup>2</sup> and M. Johanson<sup>3</sup>**

<sup>1</sup>Missouri Department of Conservation, Columbia, MO 65201

<sup>2</sup>Missouri Department of Conservation, Jefferson City, MO 65109

<sup>3</sup>Missouri Department of Conservation, Ellington, MO 63638

A shortleaf pine (*Pinus echinata* Mill.) ripping study was established by the Missouri Department of Conservation in March 1988 at the Logan Creek Conservation Area. The objective of the study was to evaluate the effects of ripping on survival, height, diameter, volume, crown spread and free-to-grow status of planted shortleaf pine seedlings.

Ripping improved survival by 4% during the first three growing seasons, and at age 16 the improvement in survival was 7.1%. It improved crown spread by 13.6% and free-to-grow status by 3.8% after two growing seasons. Ripping improved height, diameter and volume by 14.2%, 14.0% and 41.2%, respectively, after two growing seasons. However, at age 16 ripping had no effect on height and it reduced diameter and volume by 5.3% and 10.2%, respectively. The results suggest that benefits of ripping are minor and short-term.

### ***Example Abstract***

#### **A 16-year evaluation of effects of ripping on shortleaf pine on a Missouri Ozarks**

**D.P. Gwaze<sup>1</sup>, C. Hauser<sup>2</sup> and M. Johanson<sup>3</sup>**

<sup>1</sup>Missouri Department of Conservation, Columbia, MO 65201

<sup>2</sup>Missouri Department of Conservation, Jefferson City, MO 65109

<sup>3</sup>Missouri Department of Conservation, Ellington, MO 63638

A shortleaf pine (*Pinus echinata* Mill.) ripping study was established by the Missouri Department of Conservation in March 1988 at the Logan Creek Conservation Area. The objective of the study was to evaluate the effects of ripping on survival, height, diameter, volume, crown spread and free-to-grow status of planted shortleaf pine seedlings.

Ripping improved survival by 4% during the first three growing seasons, and at age 16 the improvement in survival was 7.1%. It improved crown spread by 13.6% and free-to-grow status by 3.8% after two growing seasons. Ripping improved height, diameter and volume by 14.2%, 14.0% and 41.2%, respectively, after two growing seasons. However, at age 16 ripping had no effect on height and it reduced diameter and volume by 5.3% and 10.2%, respectively. The results suggest that benefits of ripping are minor and short-term.